

Amendments to the Claims:

1. (Cancelled)

2. (Cancelled)

3. (Previously Presented) The stereo camera system of claim 5, wherein the camera is a still camera and the at least one stereo image is a still image.

4. (Previously Presented) The stereo camera system of claim 5, wherein the camera is a video camera and the at least one stereo image is a sequence of video images.

5. (Currently Amended) A stereo camera system comprising:
stereo imaging means for outputting at least one stereo image, said stereo imaging means including:

a camera;

5 a set of mirrors angled with respect to each other at a predetermined angle relative to a centrally located common plane intersecting said camera, each mirror disposed a predetermined distance from the camera along the common plane, for directing light from an object reflected in said mirrors along a straight line of sight
10 from said mirrors to the camera, for producing a stereo effect in the output of the camera;

recognition means for locating an object of interest in a field of view of the camera and for determining at least one of a distance of the object of interest from the stereo imaging means and a size of the object of interest; and

15 adjusting means for automatically changing at least one system parameter which affects the spatial resolution of the object of interest based on at least one of the determined distance of the object of interest from the stereo imaging means and the determined size of the object of interest, the adjusting means comprising at least one of:

20 angle adjustment means for adjusting a predetermined
angle between the set of mirrors;
 distance adjustment means for adjusting a
predetermined distance between the camera and the set of mirrors; and
 focal length adjustment means for changing a focal
25 length of the camera.

6. (Currently Amended) The stereo camera system of claim 5,
further comprising a controller for controlling ~~at least one of~~ the angle, distance, and
focal length adjustment means based on an input signal from the recognition means.

7.-11. (Cancelled)

12. (Previously Presented) The stereo camera system of claim 5,
wherein the recognition means is a stereo vision system.

13.-20. (Cancelled)

21. (Cancelled)

22. (Currently Amended) A stereo camera system comprising:
a stereo imaging means including two video cameras, each camera
being angled a predetermined angle and distanced a predetermined distance with
respect to each other and the object of interest, for outputting at least one stereo image
5 as a sequence of video images;

 recognition means for locating an object of interest in the field of view
of the stereo imaging means and at least one of a distance of the object of interest
from the stereo imaging means and the size of the object of interest;

 adjusting means for automatically changing at least one system
10 parameter which affects the spatial resolution of the object of interest based on at least
one of the located distance of the object of interest from the stereo imaging means and
the size of the object of interest, wherein the adjusting means comprises:

focal length adjustment means for changing a focal length of at least one of the two cameras;

15 angle adjustment means for adjusting the predetermined angle of at least one of the two cameras;

 baseline adjustment means for automatically adjusting the predetermined distance between the two cameras; and

20 distance ~~adjusting~~ adjustments means for adjusting a distance between at least one of the two cameras and the object of interest; ~~and~~

~~focal length adjustment means for changing a focal length of at least one of the two cameras.~~

23. (Currently Amended) The stereo camera system of claim 5, wherein the mirrors ~~are planar and~~ have adjacent ends positioned at a common point.

24. (Currently Amended) The stereo camera system of claim 23, wherein the ~~planar~~ mirrors are disposed for directing the light from the object which is reflected in the planar mirrors directly from the ~~planar mirrors~~ to the camera.

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Currently Amended) ~~[[The]]~~ A method of claim 21,
wherein the step of adjusting a stereo camera system to control spatial resolution of
an object of interest in the field of view of a stereo imaging means, the method
comprising the steps of:

outputting at least one image from the stereo imaging means which receives light from the object;

locating an object of interest in the field of view of the stereo imaging means and the distance of the object of interest from the stereo imaging means and the size of the object of interest;

establishing a predetermined angle between a set of mirrors, the angle being relative to a centrally located common plane intersecting said camera, and adjacent ends of said mirrors, the centrally located common plane being positioned at a common point of origin;

establishing a predetermined distance from the camera and the adjacent ends of said mirrors for reflecting light from said object from said mirrors along a straight line of sight directly to said camera, for producing a stereo effect in the output of the camera;

automatically changing at least one system parameter which affects the spatial resolution of the object of interest based on the located distance of the object of interest from the stereo imaging means and the size of the object of interest,

changing at least one system parameter includes all three of:

adjusting the predetermined angle between the set of mirrors;

adjusting the predetermined distance between the camera and the set of mirrors; and

changing the focal length of the camera.